

METHOD AND APPARATUS FOR GENERATION  
OF ARBITRARY MONO-CYCLE WAVEFORMS

ABSTRACT OF THE DISCLOSURE

A waveform generator digitally synthesizes a waveform having a plurality of successive portions that can each be as short as one mono-cycle of the waveform, or a part of one mono-cycle. The waveform generator changes at least one of a frequency, a phase and an amplitude of the waveform between each successive pair of the portions thereof. A method includes digitally synthesizing a waveform having a plurality of successive portions that can each be as short as one mono-cycle of the waveform, or a part of one mono-cycle, including changing at least one of a frequency, a phase and an amplitude of the waveform between each successive pair of the portions thereof.